

REMARKS

Applicant has studied the Office Action dated July 8, 2005. No new matter has been added. It is submitted that the application, is in condition for allowance. Applicant has amended Claims 1-2, 4, 9, 11-12, 14, 17, and 19-26. By virtue of this amendment, claims 1-26 are pending. Reconsideration and further examination of the pending claims in view of the above amendments and the following remarks is respectfully requested. In the Office Action, the Examiner:

- Rejected claims 19, 22, and 25 under 35 U.S.C. §101 as being directed to non-statutory subject matter;
- Rejected claims 1, 3-4, 6-11, 13-14, 16-19, 21-22, 24, and 25 under 35 U.S.C. §102(e) as being anticipated by McGarvey (U.S. Published Patent Application No. 2003/0028773); and
- Rejected claims 2, 5, 12, 15, 20, and 23 under 35 U.S.C. §103(a) as being unpatentable over McGarvey (U.S. Published Patent Application No. 2003/0028773) in view of Lincoln (U.S. Patent No. 6,820,201).

Overview of the Present Invention

The present invention provides a system and method for allowing access to data or processing on a remote computer. Data stored on the remote computers is often private or unavailable to the general public. In order to control access to that data, a user authentication system must be implemented. Various user authentication systems exist in the prior art which are based on the identity of a user's account or a computer requesting the information.

To overcome the problems in the prior art, the present invention, as recited for the amended claims, transmits, by a central computer, a partial response to the client computer. The partial response comprises at least a nonce value and a representation of information to be displayed on the client computer. The nonce value is digitally signed by the central computer and is used to authorize a limited number of direct

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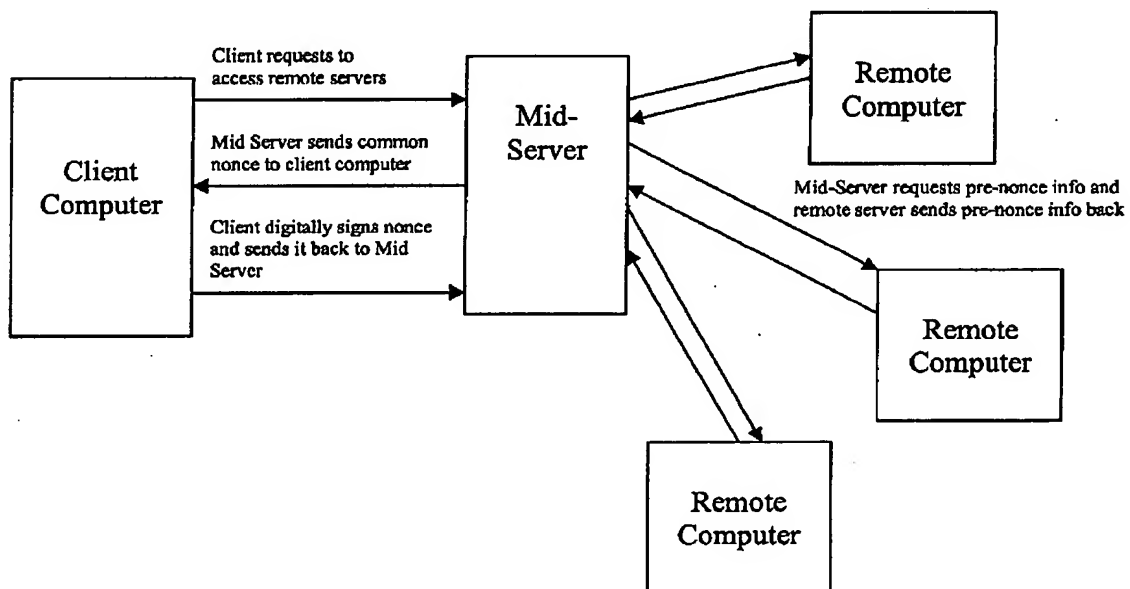
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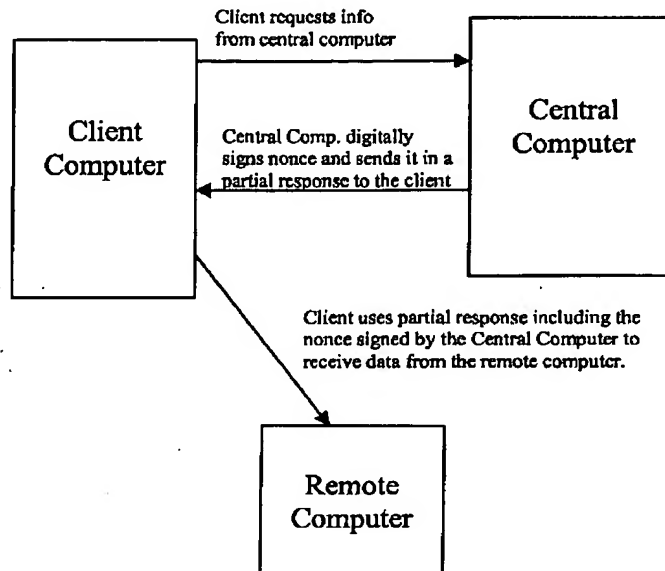
accesses to data on a remote computer and without using the central computer.

No new matter has been added. Support for this amended language is found in the application as originally filed and particularly at page 4, lines 25-28; page 5, lines 1-3; page 6, line 28 to page 7, lines 1-2; page 16, lines 3-6; and page 7, lines 19-28 to page 8, lines 1-12.

To assist in describing the technical differences between McGarvey and the present invention the following two diagrams are included. Starting with McGarvey, the following diagram illustrates how the McGarvey reference issues a nonce common to all remote computers from a mid-server to a client computer. The client computer then digitally signs the common nonce and sends the digitally signed common nonce back to the mid-server. The mid-server then uses this nonce to access the remote computes on behalf of the client computer. See McGarvey, for example, at FIGs. 1A, 1B, 4, and 6 and at col. 3 paragraphs 34 and 36:



In contrast, the following diagram illustrates how the presently claimed invention uses a nonce unique to a remote computer and is digitally signed by a central computer. See, for example, the Specification as originally filed at FIGs. 1 and 7 and at page 8, lines 20-28; page 16, lines 1-7, 9-15, and 17-28; and page 17, lines 1-9:



One advantage of the presently claim invention is that the client computer has direct access to the remote computer to retrieve requested data. The present invention does not use an intermediary (middle server) to retrieve the requested data as taught by McGarvey. Direct access allows for quicker retrieval of the requested data because the client computer does not have to wait for an intermediary to obtain the data and transmit it back to the client computer. The intermediary may be busy performing other tasks and might not be able to retrieve the requested data immediately.

As can be seen from the above diagrams, McGarvey does not teach, suggest, or anticipate "accepting a request for data from a client computer; and transmitting, by a central computer, a partial response to the client computer, wherein the partial response comprises at least a nonce value and a representation of information to be displayed on

the client computer, and wherein the nonce value is digitally signed by the central computer and is used to authorize a limited number of accesses to data on a remote computer, without using the central computer", as recited for independent claims 1, 11, and 19 and similarly for independent claims 4, 9, 14, 17, and 25.

Rejection under 35 U.S.C. §101

As noted above, the Examiner rejected claims 19, 22, and 25 under 35 U.S.C. §101 as being directed to non-statutory subject matter. The Applicant has amended claims 19, 22, and 25 to more clearly recite "A computer program product for transferring data between two application data structures, the computer program product comprising: a storage medium readable by a processing circuit and storing computer instructions for execution by the processing circuit for performing a method comprising..." The Applicant asserts that the method defined by the amended claims are directed towards statutory subject matter because the method is on "a computer program product" and includes executing computer instructions by a "processing circuit". Amended claims 19, 22, and 25 therefore, satisfy the statutory subject matter requirements of 35 U.S.C. § 101. Accordingly, the rejection of claims 19, 22, and 25 under 35 U.S.C. § 101 has been overcome.

Rejection under 35 U.S.C. §102(e) as being anticipated by McGarvey.

Referring to claims 1, 14, 17, 19, and 25, the Examiner at page 3 of the office action states that McGarvey teaches *"transmitting a partial response to the client computer, wherein the partial response contains a nonce value"*. However, the Applicant has amended claims 1, 11, and 19 to more clearly and distinctly recite "transmitting a partial response by a central computer to the client computer, wherein the partial response comprises at least a nonce value and a representation of information to be displayed on the client computer". Claims 9, 17, and 25 have also been similarly amended. Nowhere does McGarvey teach a partial response comprising at least a nonce value and a representation of information to be displayed on the client computer.

The Applicant respectfully points out to the Examiner that claim 14 was rejected under the above rationale and that claim 14 does not include the claim element "*transmitting a partial response to the client computer, wherein the partial response contains a nonce value*". However claim 11 does include this claim element and the Applicant believes the Examiner meant to include claim 11 and not claim 14 in group of claims above.

The Examiner also at page 3 of the office action states that McGarvey teaches "*the nonce value is digitally signed and is used to authorize a limited number of accesses*". The Applicant respectfully points out to the Examiner that only claims 1, 11, and 19 recite this element and not claims 14, 17, and 25 as stated by the Examiner. The Applicant had amended claims 1, 11, and 19 to more clearly and distinctly recite "wherein the nonce value is digitally signed by the central computer and is used to authorize a limited number of direct accesses to data on a remote computer, without using the central computer". Nowhere does McGarvey teach, anticipate, or suggest that the nonce value is digitally signed by the central computer or that the digitally signed nonce is used to authorize a limited number of direct accesses to data on a remote computer without using the central computer. In fact, McGarvey explicitly teaches that the client computer receives the common nonce unsigned and then the client computer digitally signs the common nonce. In other words, the system sending the common nonce to the client computer does not digitally sign the common nonce. McGarvey also explicitly teaches that a middle server accesses backend servers to retrieve data requested by the client. See McGarvey Generally and at FIGs. 1A, 1B, 7, and 9. McGarvey does not teach direct access to data on a remote computer by a client. Accordingly, the present invention distinguishes over McGarvey for at least these reasons.

Dependent claims 2, 12, and 20 have been amended to include "direct accesses" to reflect the changes in independent claims 1, 11, and 19. The amendments to independent claims 2, 12, and 20 were for clarification purposes only and not to limit the scope of the present invention.

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Claims 9, 17, and 25 have been similarly amended to recite "wherein the nonce value is digitally signed with a digital signature by the first computer". The first computer transmits the partial response including the nonce to the client computer. Accordingly, claims 9, 17, and 25 distinguish over McGarvey for at least these reasons. See the diagrams above.

Referring to claims 4, 9, and 22, the Examiner at page 3 of the office action states that McGarvey teaches that a "request contains a nonce value which has been digitally signed with a digital signature". The Applicant has amended claims 4 and 22 similar to claims 1, 11, and 19, as discussed above, and has amended claim 9 as discussed directly above. Accordingly, the present invention distinguishes over McGarvey for at least these reasons.

The Examiner cites 35 U.S.C. § 102(e) and a proper rejection requires that a single reference teach (i.e., identically describe) each and every element of the rejected claims as being anticipated by McGarvey.¹ Because the elements in independent claims 1, 4, 11, 14, 19 and 22 of the nonce being digitally signed by the central computer (claims 1, 4, 11, 14, 19, and 22) and by a first computer (claims 9, 17, and 25) which transmits the partial response including the nonce in claims 9, 17, and 25; the elements in independent claims 1, 9, 11, 17, 19, and 25 of the partial response comprising at least a nonce and a representation of information to be displayed on the client computer; and the elements in claims 1, 11, and 19 the digitally signed nonce being used to authorize a limited number of direct accesses to data on a remote computer without using the central computer (claims 1, 11, and 19) are not taught or disclosed by McGarvey. The client computer digitally signs the common nonce and not a central computer. McGarvey uses an intermediary to access data requested by a client and the client

¹ See MPEP §2131 (Emphasis Added) "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). "The identical invention must be s

does not directly access the data itself. Accordingly, the present invention distinguishes over McGarvey for at least these reasons. The Applicant respectfully submits that the Examiner's rejection under 35 U.S.C. § 102(e) has been overcome and the rejection should be withdrawn.

Furthermore, claims 9, 17, and 25 further recite that the partial response includes "a specification of a remote computer". The Applicant respectfully points out that the Examiner did not give effect to this claim element. Accordingly, the Examiner has failed to show with respect to claims 9, 17, and 25 that McGarvey anticipates each and every element of the claims 9, 17, and 25 as required under 35 U.S.C. § 102(e), as stated above. Therefore, the rejection of claims 9, 17, and 25 under 35 U.S.C. § 102(e) was improper and the rejection should be withdrawn.

For the foregoing reasons, independent claims 1, 4, 9, 11, 14, 17, 19, 22, and 25 as amended distinguish over McGarvey. Claims 2, 3, 5-8, 10, 12-13, 15-16, 18, 20-21, 23-24, and 26 depend from claims 1, 4, 9, 11, 14, 17, 19, and 22 respectively. Since dependent claims contain all the limitations of the independent claims, claims 2, 3, 5-8, 10, 12-13, 15-16, 18, 20-21, 23-24, and 26 distinguish over McGarvey, as well, and the Examiner's rejection should be withdrawn.

Rejection under 35 U.S.C. §103(a) in view of McGarvey and Lincoln

As noted above, the Examiner rejected claims 2, 5, 12, 15, 20, and 23 under 35 U.S.C. §103(a) as being unpatentable over McGarvey (U.S. Published Patent Application No. 2003/0028773 A1) in view of Lincoln (U.S. Patent No. 6,820,201 B1). With respect to McGarvey and Lange, the above arguments regarding independent claims 1, 4, 11, 14, 19, and 22 are applicable here and will not be repeated. However, additional arguments regarding claims 4, 14, and 22 with respect to McGarvey will be given below.

Claims 4, 14, and 22, in addition to the similarly amended language "wherein the nonce value is digitally signed a digital signature by a central computer", have been amended

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to more clearly recite "accepting a request for a data item from a client computer". Nowhere does McGarvey teach, anticipate, or suggest "accepting a request for a data item from a client computer, wherein the request contains a nonce value which has been digitally signed with a digital signature by a central computer", as recited for amended claim 4 and similarly for amended claims 14 and 22. McGarvey teaches accepting a request at a backend server from a mid-server. The request in McGarvey has a common nonce for a plurality of servers that was digitally signed by the client. Accordingly, the present invention distinguishes over McGarvey for at least this reason as well.

Regarding claims 2, 5, 12, 15, 20, and 23, the Examiner on page 5 of the Office Action correctly states that McGarvey does not disclose "*charging an entity upon use of the nonce*". However, the Examiner goes on to combine McGarvey and Lincoln to overcome the deficiencies of these references.² The Examiner recites 35 U.S.C. §103. The Statute expressly requires that obviousness or non-obviousness be determined for the claimed subject matter "as a whole," and the key to proper determination of the differences between the prior art and the present invention is giving full recognition to the invention "as a whole."

The McGarvey reference taken alone or in view of Lincoln simply does not suggest, teach or disclose the patentably distinct claim elements of: "transmitting, by a central computer, a partial response to the client computer, wherein the partial response comprises at least a nonce value and a representation of information to be displayed on the client computer, and wherein the nonce value is digitally signed by the central computer ..."; and "accepting a request for a data item from a client computer, wherein the request contains a nonce value which has been digitally signed with a digital signature by a central computer". McGarvey taken alone or in view of Lincoln also does not teach, anticipate, or suggest "wherein the nonce value is ... used to authorize a

² Applicant makes no statement whether such combination is even proper.

limited number of direct accesses to data on a remote computer, without using the central computer. These limitations taken "as a whole" in independent claims 1, 4, 11, 14, 19, and 22 are not present in McGarvey taken alone or in view of Lincoln. Accordingly, claims 1 and 11 distinguish over McGarvey alone and/or in combination with Lincoln.

Further, when there is no suggestion or teaching in the prior art for "a partial response to the client computer, wherein the partial response comprises at least a nonce value and a representation of information to be displayed on the client computer"; "wherein the nonce value is digitally signed by the central computer"; and "wherein the partial response comprises at least a nonce value, a specification of a remote computer, and a representation of information to be displayed on the client computer" the suggestion cannot come from the Applicants' own specification. The Federal Circuit has repeatedly warned against using the Applicant's disclosure as a blueprint to reconstruct the claimed invention out of isolated teachings of the prior art. See MPEP §2143 and *Grain Processing Corp. v. American Maize-Products*, 840 F.2d 902, 907, 5 USPQ2d 1788 1792 (Fed. Cir. 1988) and *In re Fitch*, 972 F.2d 160, 12 USPQ2d 1780, 1783-84 (Fed. Cir. 1992).

Moreover, the Federal Circuit has consistently held that when a §103 rejection is based upon a modification of a reference that destroys the intent, purpose or function of the invention disclosed in the reference, such a proposed modification is not proper and the *prima facie* case of obviousness cannot be properly made. See *In re Gordon*, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984).

Here the intent, purpose, and function of McGarvey taken alone or in view of Lincoln is a system where a client computer digitally signs a nonce. A middle tier server generates a common nonce and sends it to the client computer. At this point, the common nonce is not digitally signed. When the client computer receives the nonce, it digitally signs it and transmits it back to the middle tier server. Because Lincoln teaches

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that a vendor computer digitally signs a nonce generated by the user computer (See FIG. 3a), this combination as suggested by the Examiner destroys the intent and purpose of McGarvey's intent of having the client computer digitally sign a common nonce generated by the middle tier server. In contrast, the intent of the present invention is transmitting a partial response including a nonce that has been digitally signed by a central computer and is used to authorize a limited number of direct accesses to data on a remote computer without using the central computer. In one embodiment the partial response also includes a representation of information to be displayed on the client computer. Accordingly, the combination of McGarvey and Lincoln results in an inoperable system. Therefore, the Examiner's case of "*Prima Facie Obviousness*" should be withdrawn.

Furthermore, the Federal Circuit stated in McGinley v. Franklin Sports, Inc., (Fed Cir 2001) that if references taken in combination would produce a "seemingly inoperative device," such references teach away from the combination and thus cannot serve as predicates for a prima facie case of obviousness. In re Sponnoble, 405 F.2d 578, 587, 160 USPQ 237, 244 (CCPA 1969) (references teach away from combination if combination produces seemingly inoperative device); see also In re Gordon, 733 F.2d 900, 902, 221 USPQ 1125, 1127 (Fed. Cir. 1984) (inoperable modification teaches away). Here, McGarvey teaches that a nonce is digitally signed by a client computer and Lincoln teaches an incompatible system where a vendor computer (not a client computer) digitally signs a nonce. Therefore, the combination of McGarvey with Lincoln to produce the presently claimed invention where a central computer transmits a partial response including a nonce that is digitally signed by a central computer and a representation of information to be displayed on the client computer, would produce an inoperable device. Accordingly, the combination of McGarvey and Lincoln is improper.

For the foregoing reasons, independent claims 1, 4, 11, 14, 19, and 22 as amended distinguish over McGarvey alone and/or in combination with Lincoln. Claims 2, 5, 12, 15, 20, and 23 depend from claims 1, 4, 11, 14, 19, and 22 respectively. Since

dependent claims contain all the limitations of the independent claims, claims 2, 5, 12, 15, 20, and 23 distinguish over McGarvey alone and/or in combination with Lincoln, as well, and the Examiner's rejection should be withdrawn.

CONCLUSIONS

The remaining cited references have been reviewed and are not believed to affect the patentability of the claims as previously amended.

In light of the Office Action, Applicant believes these amendments serve a useful clarification purpose, and are desirable for clarification purposes, independent of patentability. Accordingly, Applicant respectfully submits that the claim amendments do not limit the range of any permissible equivalents.

Applicant acknowledges the continuing duty of candor and good faith to the disclose information known to be material to the examination of this application. In accordance with 37 CFR § 1.56, all such information is dutifully made of record. The foreseeable equivalents of any territory surrendered by amendment is limited to the territory taught by the information of record. No other territory afforded by the doctrine of equivalents is knowingly surrendered and everything else is unforeseeable at the time of this amendment by the Applicant and his attorneys.

Applicant respectfully submits that all of the grounds for rejection stated in the Examiner's Office Action have been overcome, and that all claims in the application are allowable. No new matter has been added. It is believed that the application is now in condition for allowance, which allowance is respectfully requested.

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PLEASE, if for any reason the Examiner finds the application other than in condition for allowance, the Examiner is invited to call either of the undersigned attorneys at (561) 989-9811 should the Examiner believe a telephone interview would advance the prosecution of the application.

Respectfully submitted,

Date: September 23, 2005

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